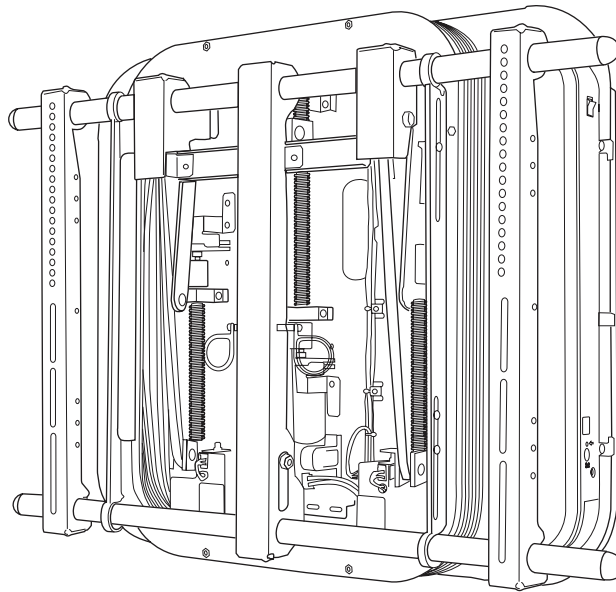


SANUS | SYSTEMS

LA112

(6901-100189 <01>)

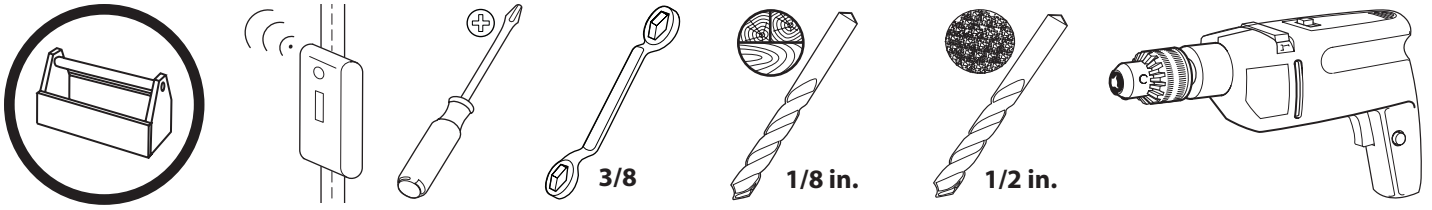
Backed by CLO



Thank you for choosing the Sanus Systems LA112 motorized mount. The LA112 is a remote-controlled automated mount for flat panel monitors designed to be fully adjustable. The LA112 supports flat panel monitors with a maximum weight of 81 kg (180 lbs.), ranging in size from 40 in. – 63 in. (102 cm – 106 cm). The LA112 extends up to 12 in (30 cm) from the wall.

CAUTION

Do not use this product for any purpose not explicitly specified by Sanus Systems. Improper installation may cause property damage or personal injury. If you do not understand these directions, or have doubts about the safety of the installation, contact Sanus Systems Customer Service or call a qualified contractor. Sanus Systems is not liable for damage or injury caused by incorrect mounting, assembly, or use.



Supplied Parts and Hardware

Before starting assembly, verify all parts are included and undamaged. If any parts are missing or damaged, do not return the item to your dealer; contact Sanus Systems Customer Service. Never use damaged parts!



WARNING

This product contains small items that could be a choking hazard if swallowed. Keep these items away from young children!

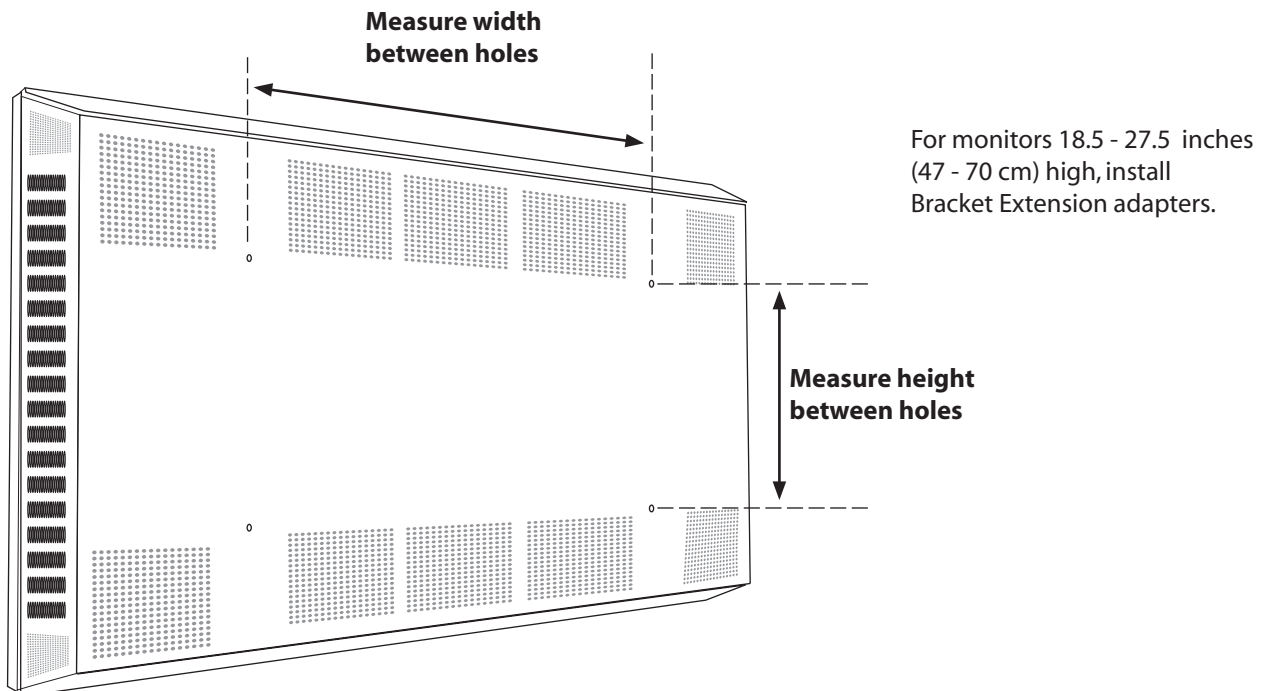


Adapters are not included with the LA112. If you need an adapter, contact Sanus Systems Customer Service at 1-800-359-5520 or email us at info@sanus.com. You may also visit our website: www.sanus.com

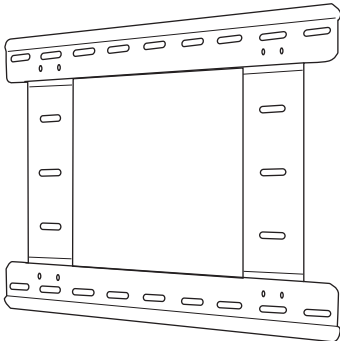
Determine if your monitor will require adapters to fit the LA112. Measure the distance between the mounting holes on the back of the monitor.

For monitors with hole patterns less than 21.5 inches (54.6 cm) wide, install Cross Plate adapters.

For monitors with hole patterns 26 - 34.5 inches (66 - 87.6 cm) wide, install Bar Extension adapters.



NOTE: Items [1] through [4] are pre-assembled.

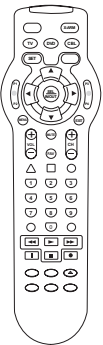


[01] x 1

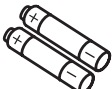
[02] x 1

[03] x 2

[04] x 4



[09] x 1



[05] x 2



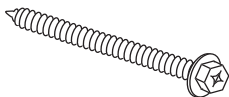
[06] x 1



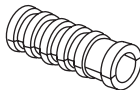
[07] x 1



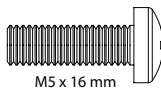
[08] x 1



[10] x 6

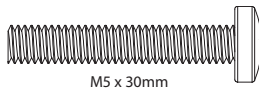


[11] x 6



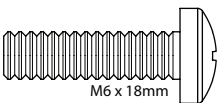
M5 x 16 mm

[12] x 4



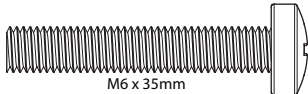
M5 x 30mm

[13] x 4



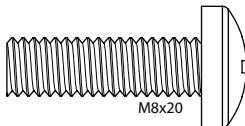
M6 x 18mm

[14] x 4



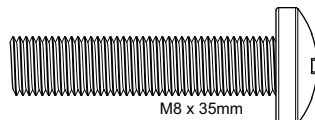
M6 x 35mm

[15] x 4



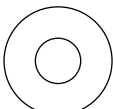
M8x20

[16] x 4



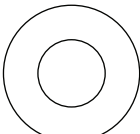
M8 x 35mm

[17] x 4



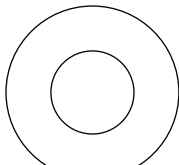
M4/M5

[18] x 4



M6 / M8

[19] x 4



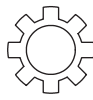
M8

[20] x 4



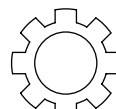
M5

[21] x 4



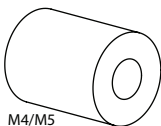
M6

[22] x 4



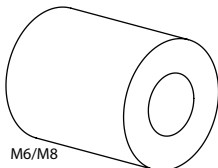
M8

[23] x 4



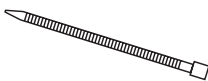
M4/M5

[24] x 4

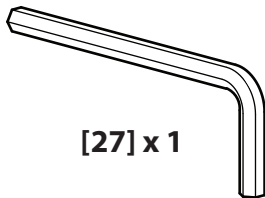


M6/M8

[25] x 4



[26] x 10



[27] x 1

 **CAUTION**

Avoid potential injuries or damage to equipment. The LA112 is designed to mount to vertical walls only. Do not attempt to mount the LA112 to ceilings or non-vertical walls. For indoor use only! Do not mount outdoors.

 **CAUTION**

Avoid potential injuries or damage to equipment! Always observe the LA112 while in motion. To stop the motion, press any of the arrow keys on the remote control. Never allow children to operate the LA112.

 **CAUTION**

Avoid potential injuries or damage to equipment! Do not operate the LA112 unless all protective covers and guards are in place. Keep away from moving parts.

 **CAUTION**

Avoid damage to equipment! Use only accessories distributed or recommended by Sanus Systems. Do not operate the LA112 if the appliance has malfunctioned, or has been damaged in any way; return to an authorized service facility for inspection.

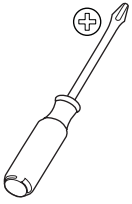
 **CAUTION**

Avoid potential injuries or damage to equipment! The LA112 must be connected to a grounded outlet. Disconnect the LA112 when not in use, or before cleaning or servicing the unit. To disconnect the LA112, turn off all controls then remove the plug from the outlet.

 **CAUTION**

Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.

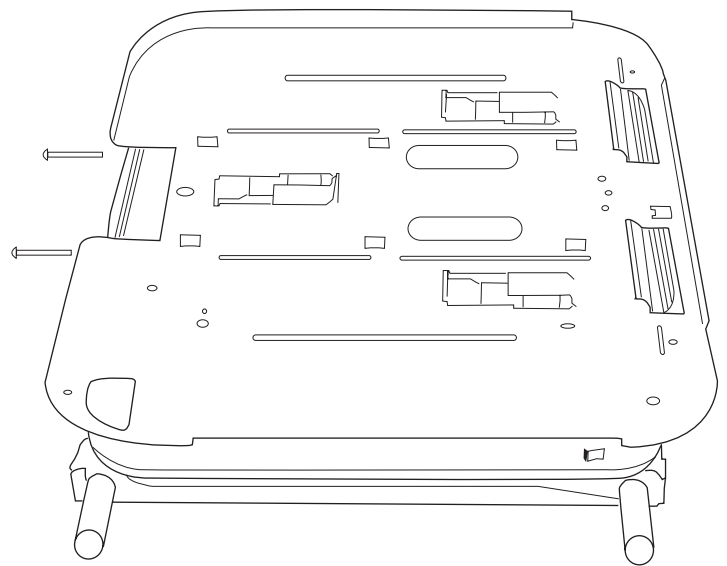
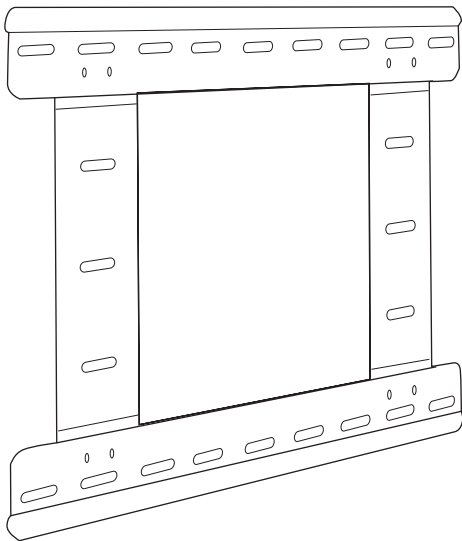
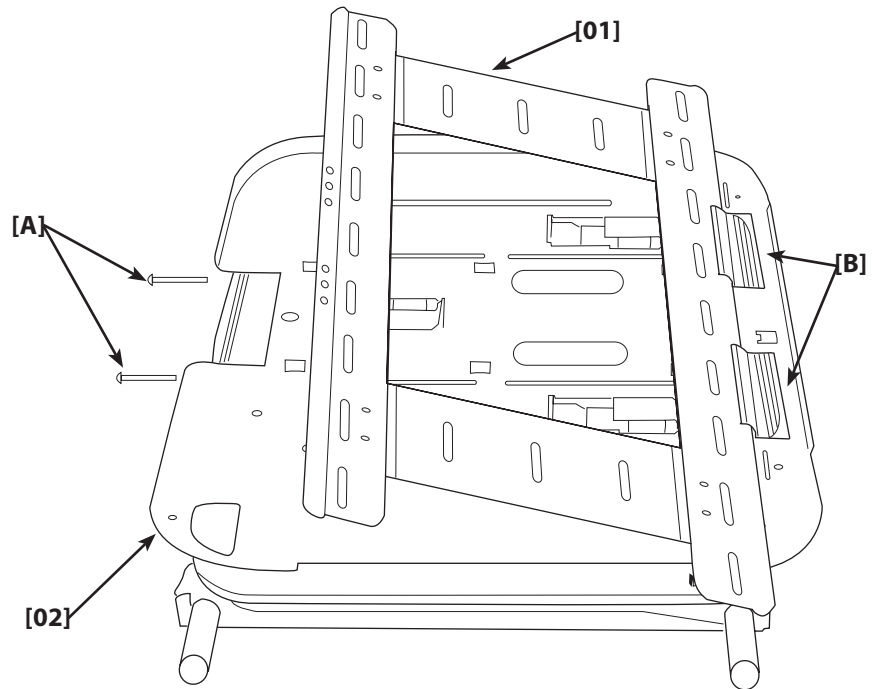
1: Remove Wall Plate from Arm

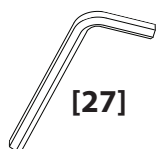


The LA112 is shipped with the wall plate and arm assembled. You must remove the wall plate before installation.

Loosen the two fasteners **[A]** securing the wall plate **[01]** to the arm assembly **[02]**.

Tilt the wall plate away from the arm assembly then lift the wall plate to disengage it from the hooks **[B]**.

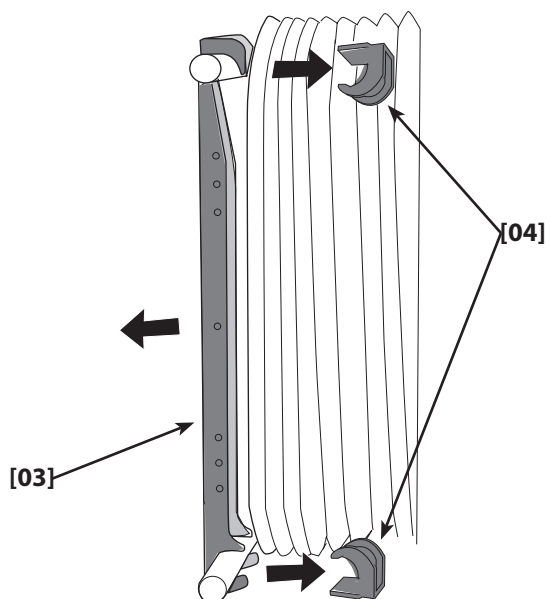
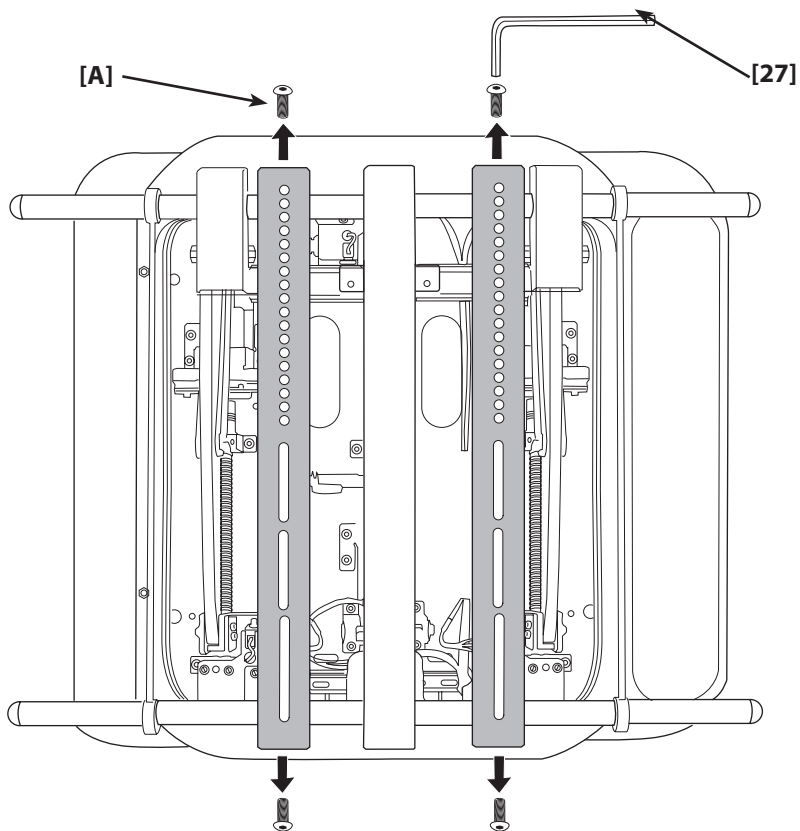




2: Remove Mounting Brackets

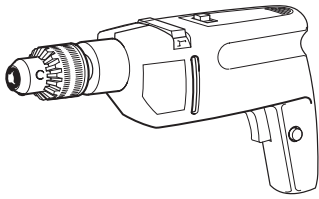
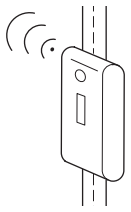
You must remove the two TV Mounting Brackets from the LA112 before attaching the arm to the wall plate.

Remove the hex screws **[A]** from the mounting brackets **[03]**. Pull the safety clips **[04]** from the back of the mounting brackets, then remove the mounting brackets from the arm assembly.

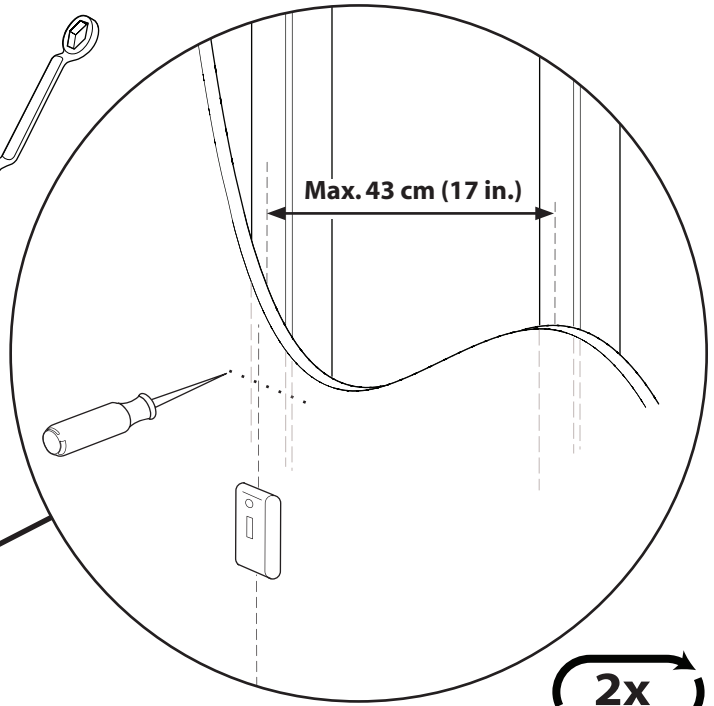
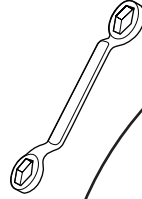


3: Mount Wall Plate

For Wood Stud Walls

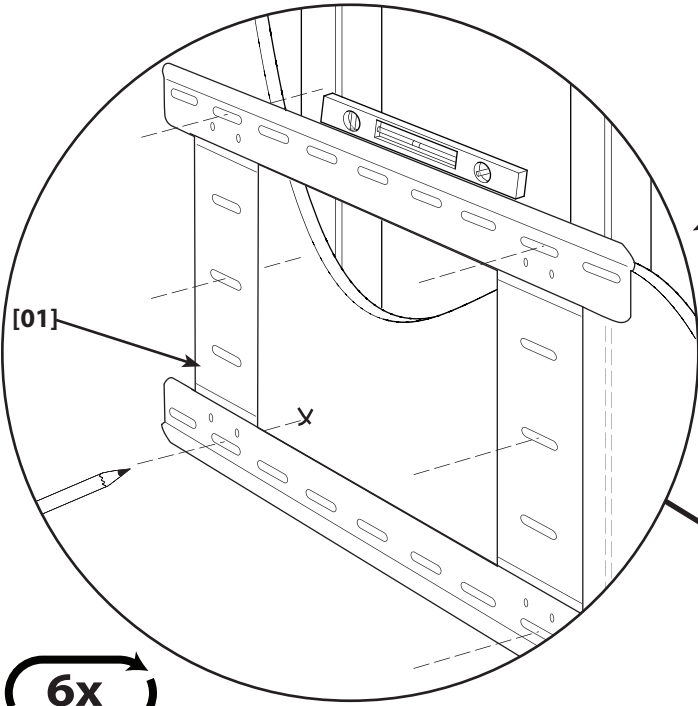


1/8 in.

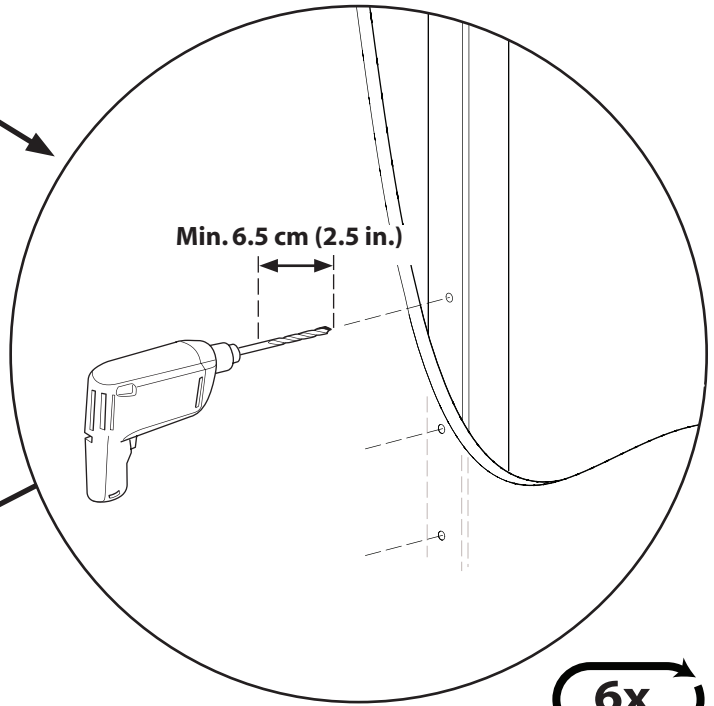


Max. 43 cm (17 in.)

2x

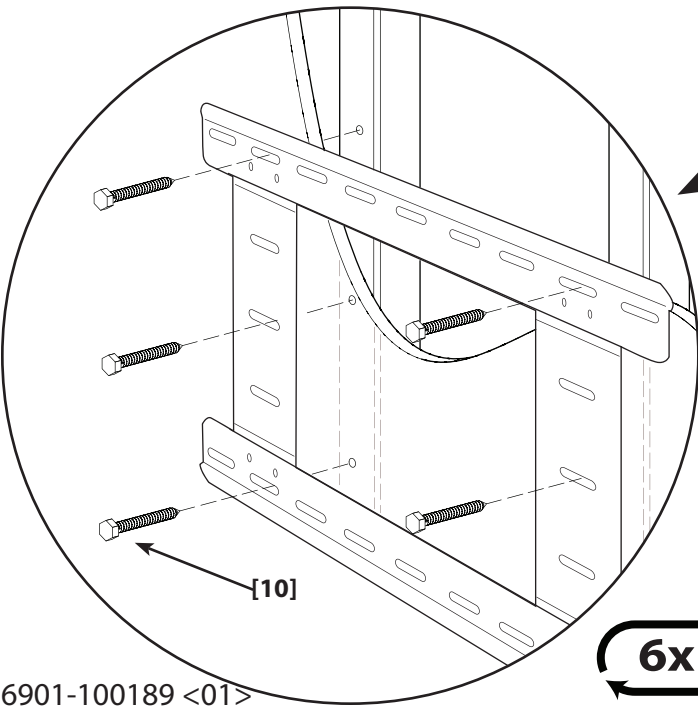


6x



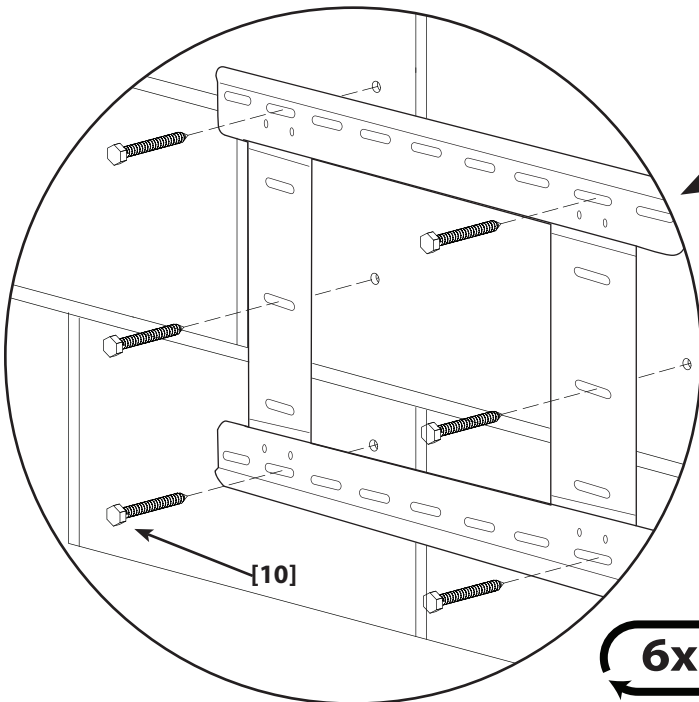
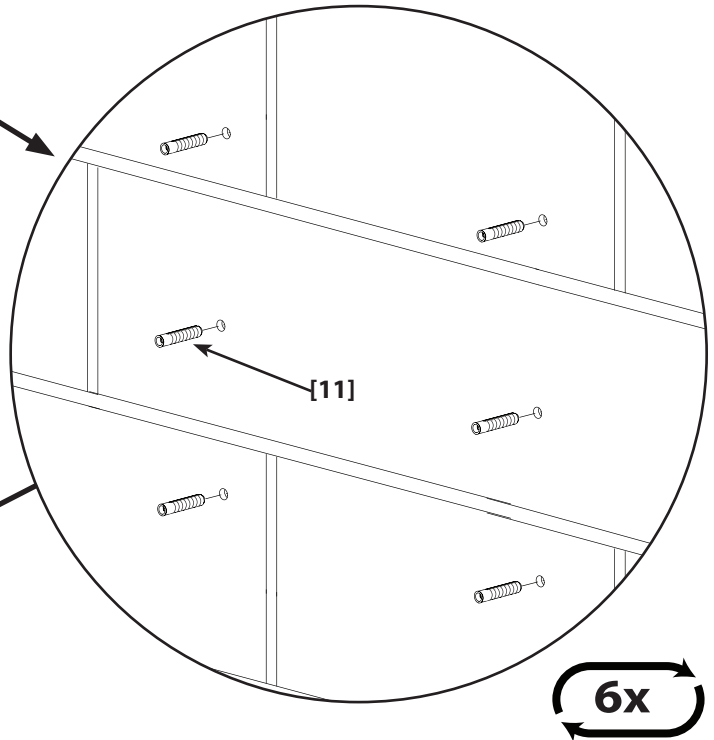
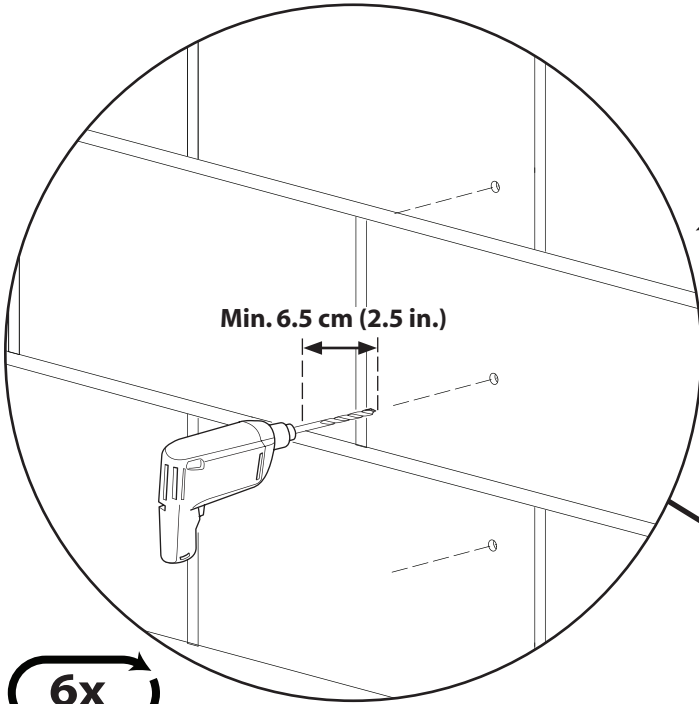
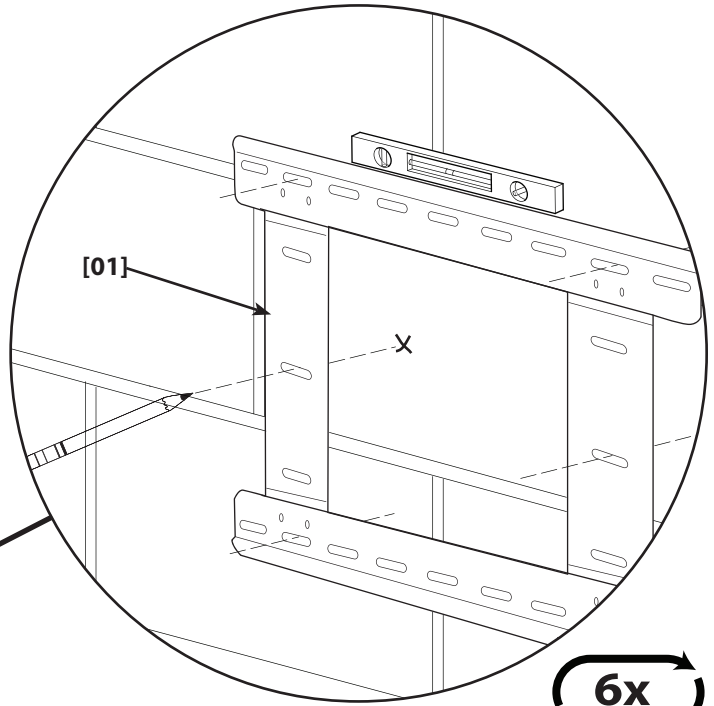
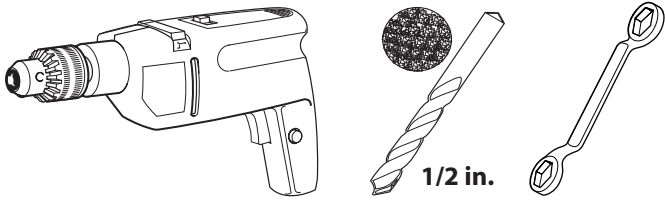
Min. 6.5 cm (2.5 in.)

6x



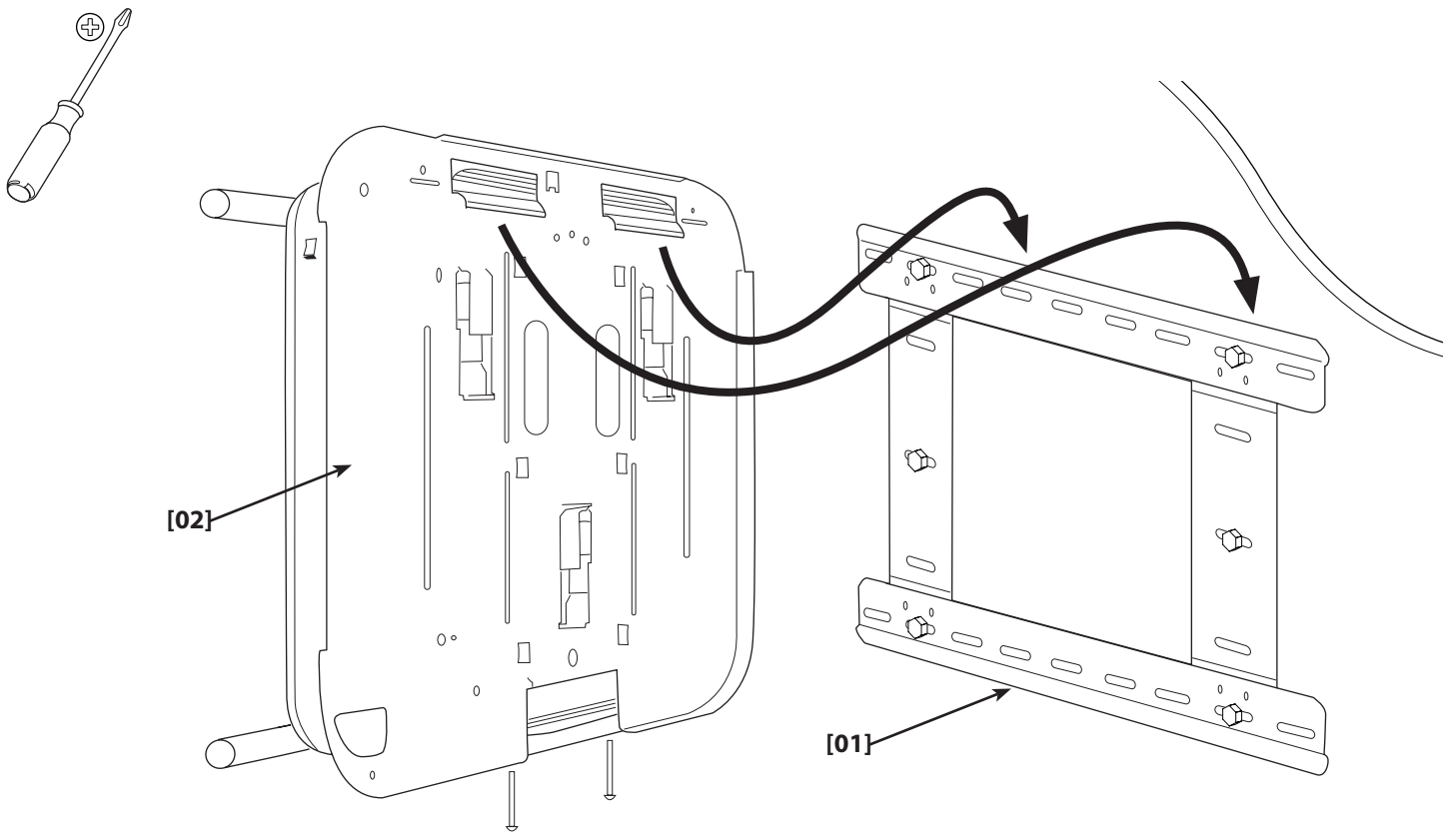
6x

For Concrete Block or Brick Walls



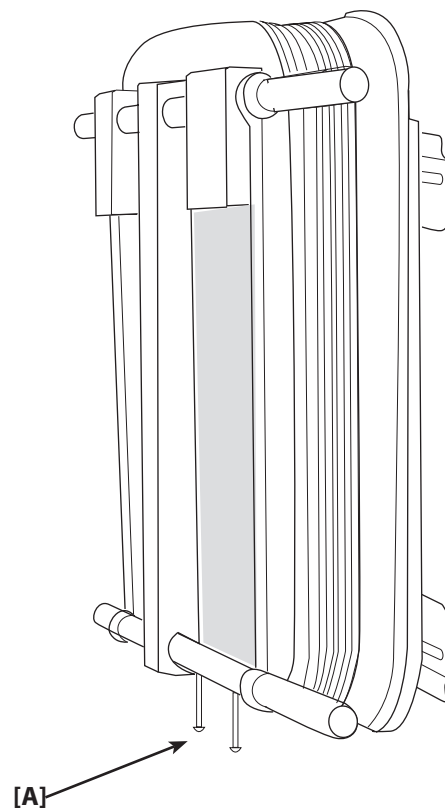
CAUTION
Avoid potential injuries and / or property damage!
Never drill into the mortar between concrete blocks!

4: Install Arm Assembly to Wall Plate



Hang the arm assembly [02] over the top rail of the wall plate [01]. Be sure both hooks on the arm assembly engage with the rail.

Align the arm assembly to the desired location on the wall plates. **Secure the bottom of the arm assembly to the wall plate by tightening the two fasteners [A] at the bottom of the arm assembly.**



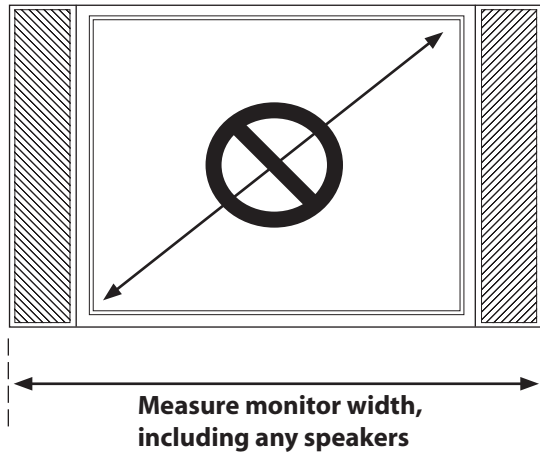
5: Set the Monitor Width

CAUTION

Avoid potential injuries and / or property damage! Do not use the monitor manufacturer's "screen size"; you must measure the width of the monitor case, including any speakers attached to the sides.

CAUTION

The LA112 restricts movement based up on the TV width set on the side controls. The TV width must be set correctly before operating the LA112.



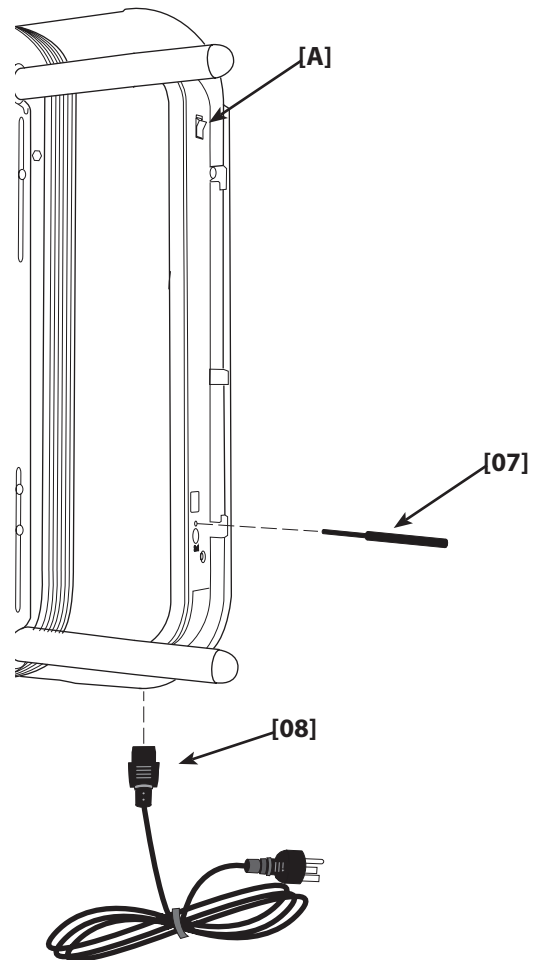
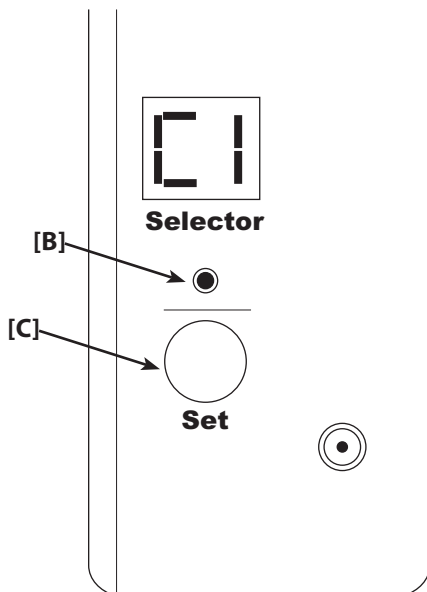
To set the monitor width, determine the correct code from the chart below.

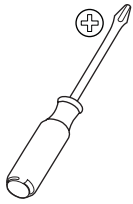
Insert the power cord [08] into the plug on the arm assembly, then connect the power cord to a grounded outlet.

Turn the power switch [A] to the ON position. Insert the selector pin [07] into the receptacle [B] and press until the correct code is displayed.

Press and hold the "Set" button [C] until the display stops blinking to accept the code.

<u>CODE</u>	<u>WIDTH</u>
C1	102 - 113 cm (40 - 44.9 in.)
C2	114 - 123 cm (45 - 48.9 in.)
C3	124 - 140 cm (49 - 55.9 in.)
C4	141 - 155 cm (56 - 61.0 in.)

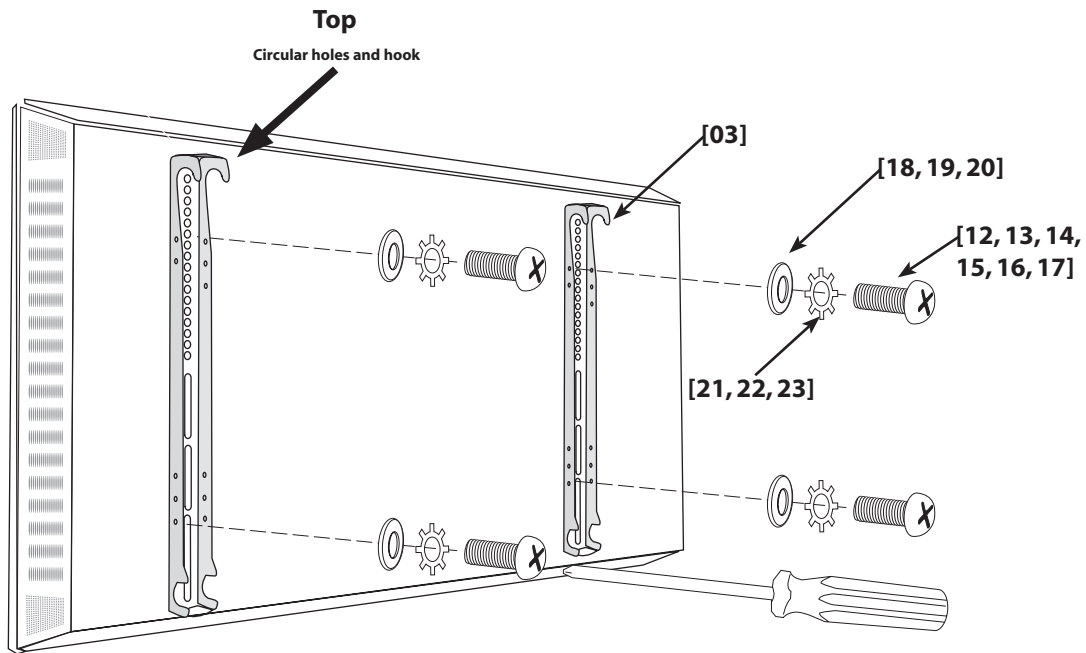




6: Install Mounting Brackets

CAUTION

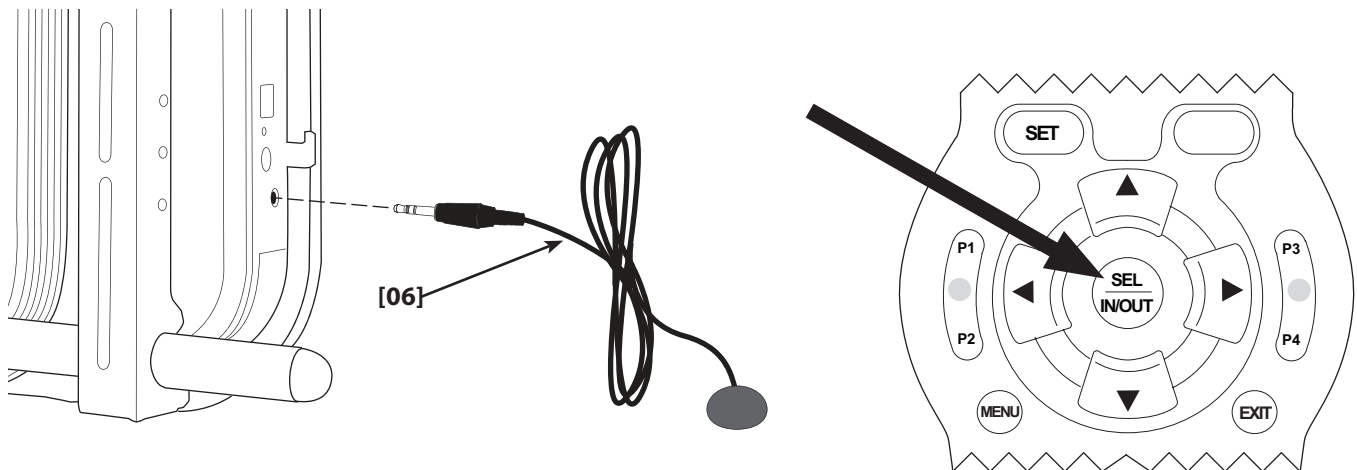
If your television came with mounting bolts use those. If not, select bolts from those supplied with your LA112. Bolts selected must match the manufacturer's recommendations.



6.1

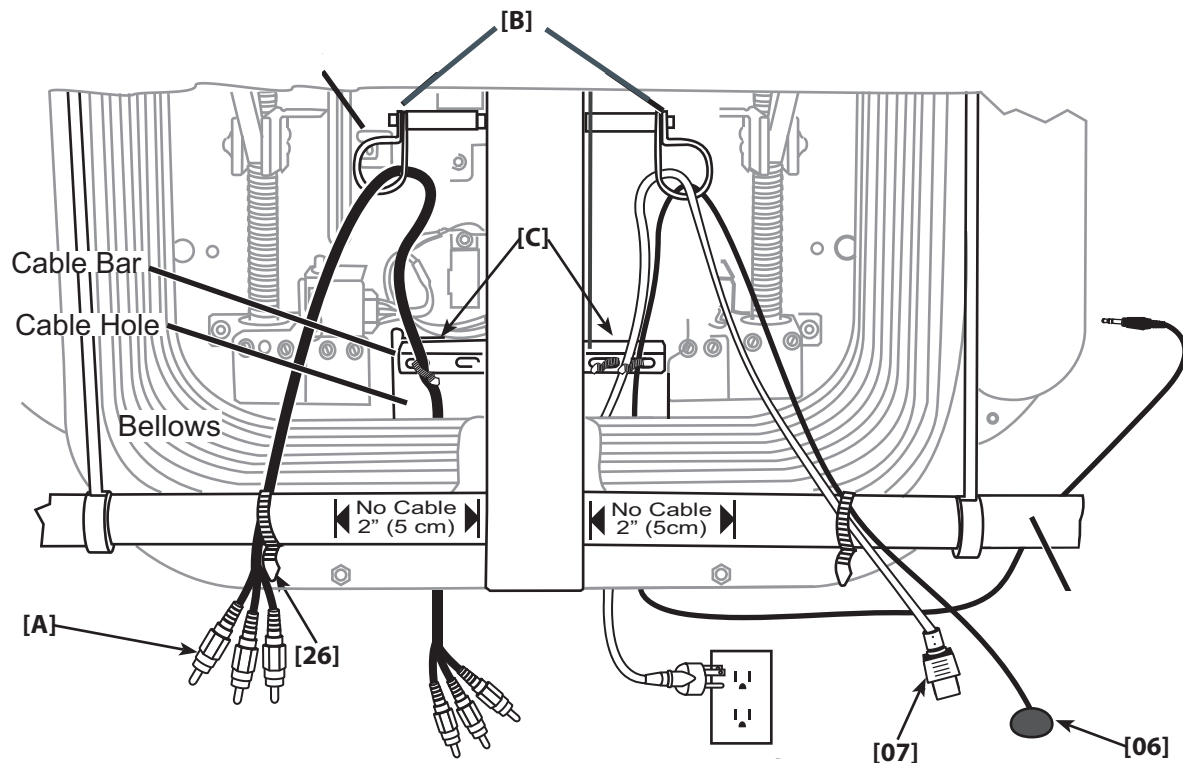
Connect the IR receiver cable [06] to the receiver port on the arm assembly.

On the remote control [09], press the "X-ARM" button to activate the remote. Then press the "SEL-IN/OUT" button once to extend the arm.



7: Route Cables

For Power Outlets Located Outside the Bellows



CAUTION

Avoid potential property damage! Keep all cables away from the center beam of the arm assembly. Do not place cables closer than 5cm (2 in.) on either side of the beam.

Route the AV cables **[A]** over the bottom cross bar, through one of the cable loops **[B]**, then through the cable access port at the back of the arm assembly. Route the power cord **[07]** over the bottom cross bar, through the opposite cable loop **[B]**, then through the cable access port at the bottom of the arm assembly.

Disconnect the plug end of the IR receiver cable **[06]** and route the cable over the bottom cross bar, through one of the cable loops **[B]**, then through the access port at the bottom of the arm assembly.

Secure the cables to the bottom cross bar with cable ties **[26]** as shown. Be sure to keep all cables at least 5cm (2 in.) away from the center beam!

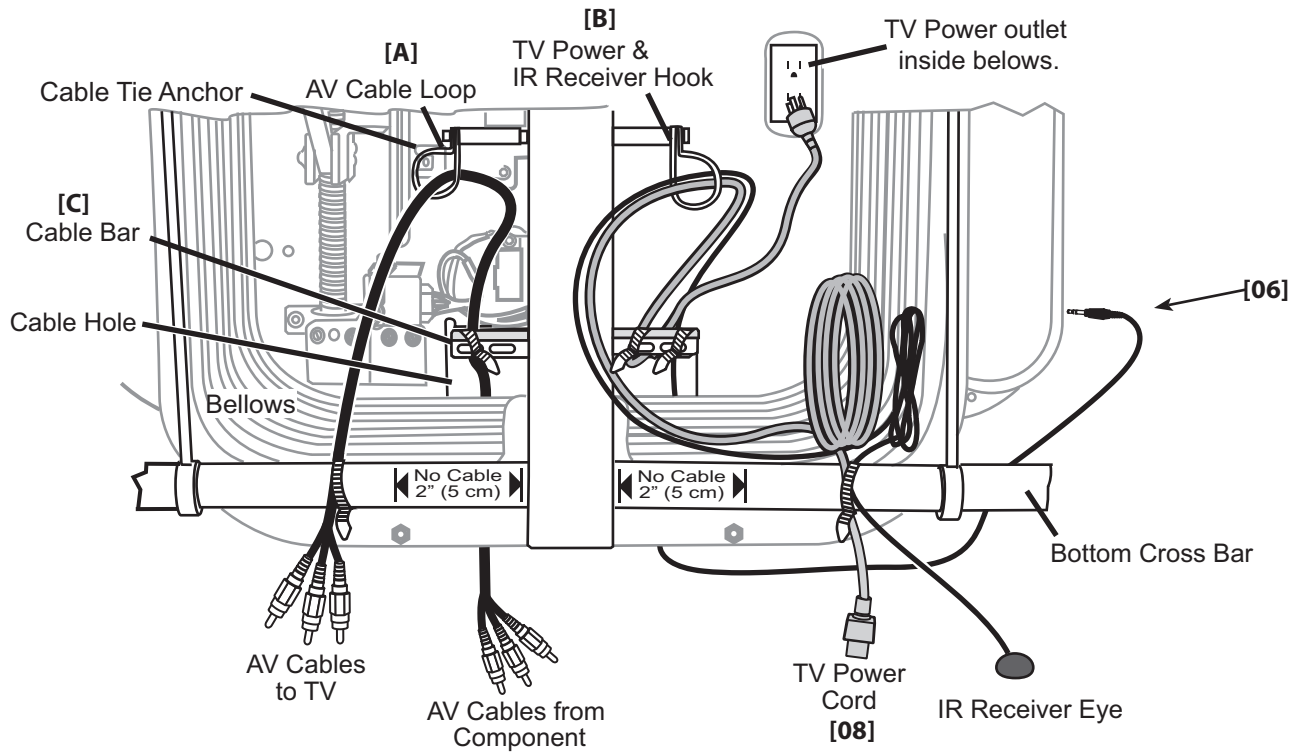
Check that the cables are long enough to allow free movement of the arm assembly, but are not long enough to get caught in the mechanical parts of the arm assembly. Using the remote, adjust the arm up, down, and side to side through its full extension. Secure the cables to the cable bar **[C]** at the back of the arm assembly.

For Power Outlets Located Inside the Bellows



CAUTION

Avoid potential property damage! Keep all cables away from the center beam of the arm assembly. Do not place cables closer than 5cm (2 in.) on either side of the beam.



Route the AV cables over the bottom cross bar, through the left cable loop **[A]**, then through the cable access port at the bottom of the arm assembly.


Route the power cord **[08]** over the bottom cross bar, through the opposite cable loop **[B]**, then through the cable access port at the bottom of the arm assembly. Disconnect the plug end of the IR receiver cable **[06]** and route the cable over the bottom cross bar, through the right cable loop **[B]**, then through the access port at the back of the arm assembly.

Secure the cables to the bottom cross bar with cable ties **[26]** as shown. Be sure to keep all cables at least 5cm (2 in.) away from the center beam!

Check that the cables are long enough to allow free movement of the arm assembly, but are not long enough to get caught in the mechanical parts of the arm assembly. Using the remote, adjust the arm up, down, and side to side through its full extension. Secure the cables to the cable bar **[C]** at the back of the arm assembly.

8: Install Monitor to Wall Plate

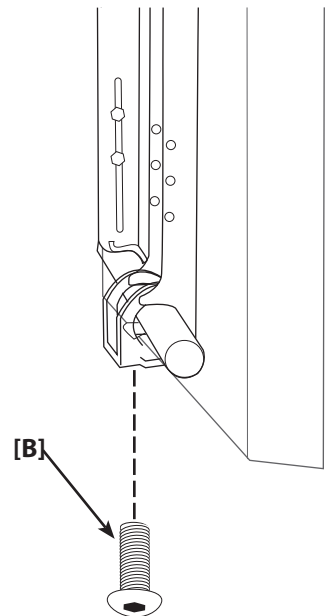
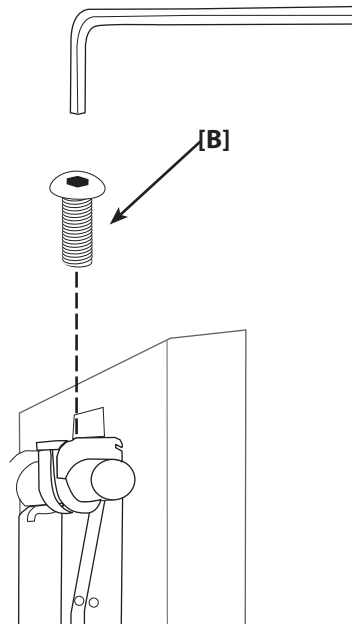
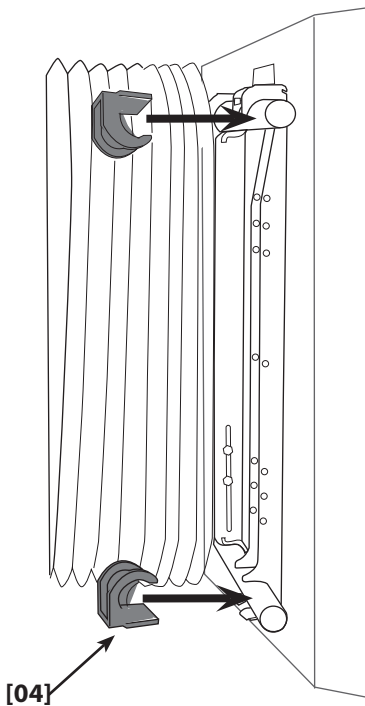
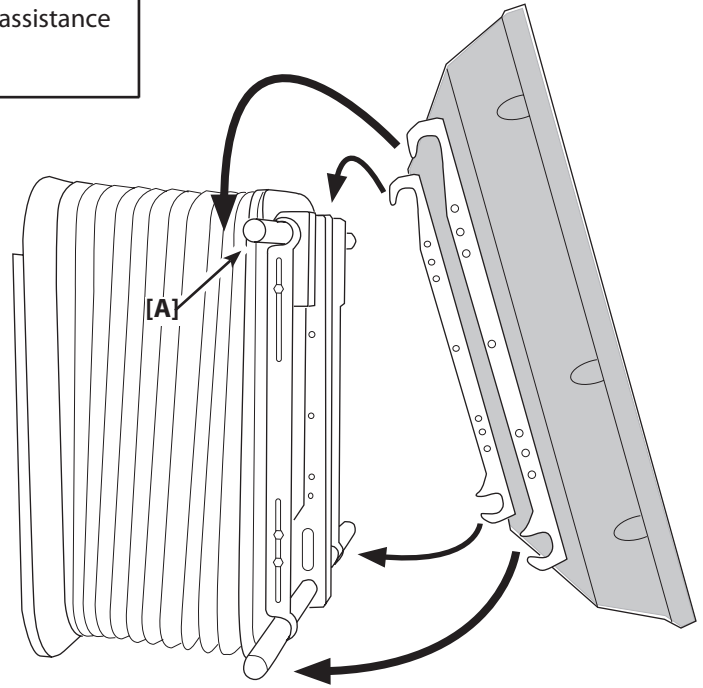


 **HEAVY!** You will need assistance with this step.

Position the hooks at the top of the mounting brackets over the top cross bar **[A]**.

Guide the bottom of the mounting brackets down and towards the arm assembly until the brackets engage with the bottom cross bar.

Install the four safety clips **[04]** as shown. Secure the safety clips with the fasteners **[B]**.



9: Calibrate the Arm

Calibrate Arm to the Monitor

NOTE: LA112 must be calibrated to the TV to avoid hitting the wall.

1. Turn the control box power switch to "Off".
2. While holding down the "**Set**" button, turn the control box power switch back on and continue to hold Set until "**Ct**" appears in the LED display.
3. Stand away from the LA112 as it calibrates. LA112 will move back to the home position against the wall when calibration is complete.
4. If your TV is not parallel with the wall, proceed to the next section, "Reset the LA112 to Home Position".

Reset the LA112 Home Position

1. Move the X-arm to its home position against the wall by pressing the "**SEL-IN/OUT**" button on the remote control.
2. Insert the pointer into the control box Selector hole and press the "**SET**" button until the display reads "**HP**".
3. Adjust the X-arm to the desired home position using the arrow keys on the remote control.
4. Press and hold the control box "**Set**" button for three seconds. Now the X-arm will move to the new home position each time the "**SEL-IN/OUT**" button on the remote control is pushed.

Adjust Monitor Position

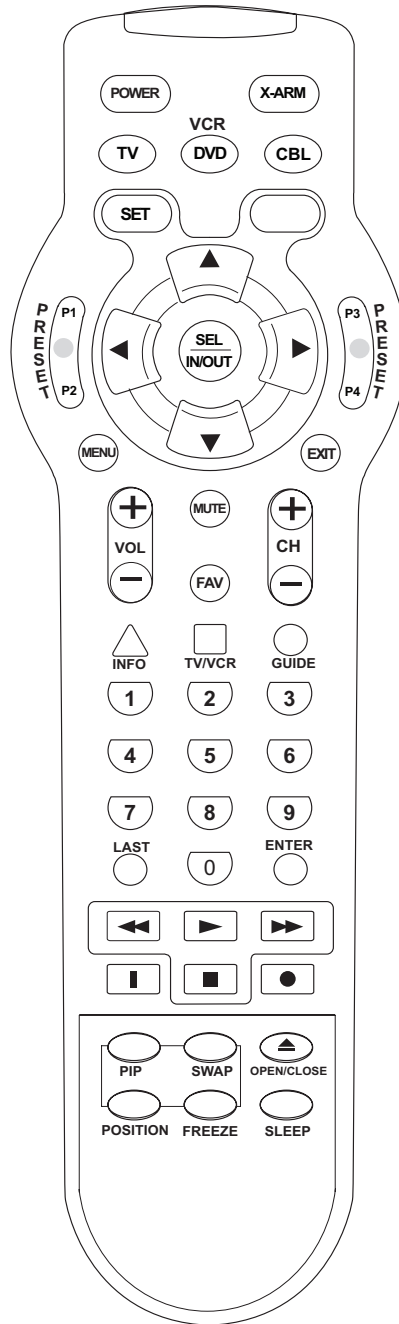


CAUTION

Avoid property damage and personal injury. Set the correct width for your TV before using the LA112. See the "Setting LA112 TV Width" section above to set the correct width for your TV. While the LA112 is in motion keep people and objects away from it and do not leave it unattended.

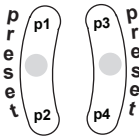
1. Turn the control box power switch to "**On**".
2. Press the "**X-arm**" and the "**Power**" keys on the remote control.
3. If the TV width code is not displayed on the control box, press "**POWER**" on the remote. Then press "**SEL-IN/OUT**" once to extend the TV out from the wall. There is no need to hold down the button. Pressing any of the arrow buttons while LA112 is moving the TV will stop it.
4. Use the remote control arrow keys to move the TV in the desired direction. To stop movement, press any of the arrow keys or the "**SEL-IN/OUT**" key.

10. Using the Remote Control



TV **VCR** **DVD** **CBL** **X-ARM**
Select the desired device.

SET
Sets the P1 or P2 Preset position to the current X-Arm position.



Moves LA112 to the selected preset position.



In X-arm mode: Tilt the TV.
In TV, DVD and CBL modes: Navigate on-screen menu of selected device.



Opens the setup menu for the selected device.



Adjusts the volume up or down.



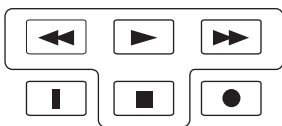
Turns the sound off for the selected device.



Displays information about the current video source.



Returns to the previous channel.



Rewind, play, fast-forward, pause, stop, and record functions for videos.



In TV mode: Freezes PIP.
In DVD mode: Displays Setup menus.
In VCR mode: Displays tape speed.
In CBL mode: Page Up.



Puts the selected device into a low power consumption state.



Turns on the Picture in Picture feature.



In CBL mode: Moves the page down.
In PIP mode: Changes the position of the PIP window.



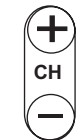
Switches the PIP and background video sources.



In X-arm mode: Returns LA112 to home position.
In TV, DVD and CBL modes: Selects or sets options.



Leaves the current menu.



Changes to the next or previous channel or chapter.



In CBL mode: Returns to programmed favorite channels.



Rotates through the available video sources for the selected device.



In CBL mode: Displays guide.
In TV mode: Opens closed captioning (CC).






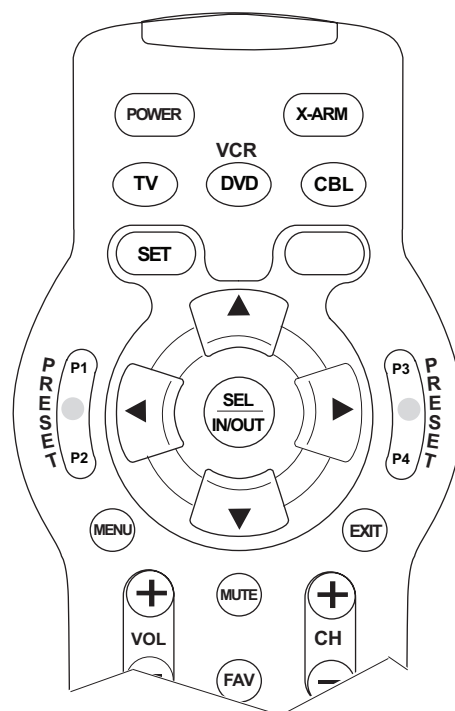
Opens/closes the media tray for the selected device.

Programming the Preset Position Keys




CAUTION

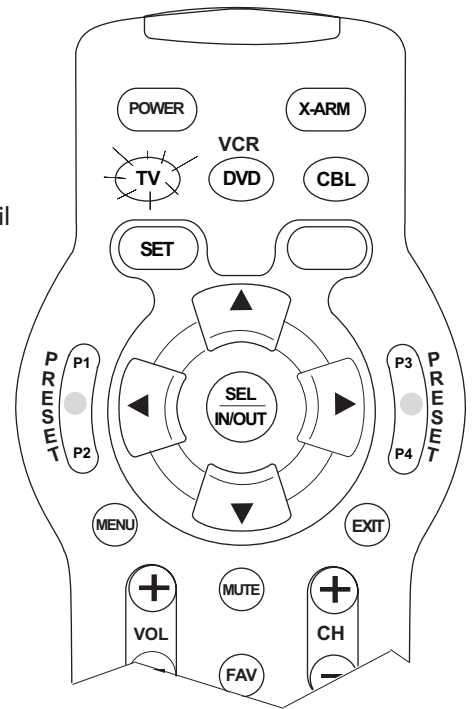
To avoid injury or property damage, confirm correct TV width is set before programming the Preset Positions. Do not come in contact with the LA112 while it is in motion.

1. Turn control box power switch to "On".
2. Press  + .
3. Move the LA112 to the desired position for preset using the remote control arrow keys.
4. Press .
5. Select the desired preset button twice within 3 seconds to set.
6. Repeat steps 1-5 for the remaining presets.



Programming the Remote to Operate an Existing TV

1. Turn your TV on.
2. Find your TV's codes from the list on the following page.
3. Press and hold  +  until the TV button stays lit.
4. Point the remote at your TV and enter a code from the list. Keep entering codes until the TV powers off.
5. Press . The **TV** button will blink 3 times and go out.
6. Test that the remote works properly with your TV. If not, repeat steps 3-5.



NOTE: To program the remote control to operate your DVD player, VCR and cable box, follow the above steps replacing "TV" for the appropriate device. The following pages list TV, DVD player, VCR and cable box codes.

Programming Codes

TV Programming Codes

TV Brand	Code Numbers	TV Brand	Code Numbers
Admiral	220 160 081 072	Emerson	245 155 154 143 096 076 051 048 047 043 028 005 004 001
Advent	231	Fisher	057 007
Aiwa	213	Fujitsu	244
Akai	146 001	Funai	245 043 028
Amark	143	Funai	245 043 028
Ampro	073	Futuretech	043
Amstrad	052	Gateway	041 202
Anam	242 131 080 056 043	GE	220 165 160 155 144 074 073 056 034 009 008 004 001
Aoc	058 004 001	Gradiente	218
Apex	247	haier	203
Audiovox	076	Hallmark	004
Blaupunkt	088	Hitachi	143 075 072 023 012 011 010 009 004
Broksonic	241	Infinity	249 164
Caim	201	JBL	249 164
Candel	004 003 002 001	JCPenney	160 143 101 065 030 024 009 008 004 001
Capehart	058	Jensen	013
Cetronic	043	JV	237 230 145 083 070 038 034
Citizen	143 103 101 043 004 003 002 001	KEC	043
Classic	043	Kenwood	070 001
Concerto	004	Kloss	059 002
Contec	051 043	KMC	143
Cornea System	246	KTV	250 154 143 043 001
Coronado	143	LG (Goldstar)	143 127 119 106 004
Craig	043	Lodgenet	072
Crown	143 043	Loewe	249
Curtis Mathes	143 101 004 001	Logik	072
CXC	043	LXI	249 164 160 081 052 015 007
Daewoo	143 127 125 114 103 076 043 027 016 004	Magnovox	249 205 223 222 216 210 164 160 127 094 064 063 060 059 022 004 003 001 218 219
Daytron	143 004	Marantz	249 164 001
Dell	036	Matsui	164
Dwin	177	Memorex	096 072 007 004
Dynasty	043	Metz	088
Dynatech	062	Mga	042 028 024 004 001
Eiki	187	Minerva	088
Electrohome	196 143 076 024	Mitsubishi	225 146 124 109 042 040 031 028 021 024 004
Motorola	217	Signature	072
MTC	101 062 004 001	Sony	194 147 139 070

Programming Codes

TV Programming Codes, continued

TV Brand	Code Numbers	TV Brand	Code Numbers
Nad	025 015	Soundesign	043 028 004 003
NEC	056 040 024 019 016 001	SSS	043 004
Nikei	043	Supremacy	002
Olevia	045	Sylvania	249 245 240 229 226 211 164 160 127 064 063 060 059 003
Onking	043	Symphonic	245
Omwa	043	Tandy	081
Optonica	081 019	Signature	072
Orion	096	Tatung	062 056
Panasonic	250 249 238 227 164 080 056 034	Technics	080 034
Philco	164 064 063 060 059 056 024 004 003 0011	Techwood	004
Phillips	249 205 164 127 093 059 038 005 004 003 001	Teknika	043 101 072 043 028 024 004 003 002
Pioneer	135 025 023 018 001	Telefunken	037
Portland	143 004	Telerent	072
Proscan	197 165 220 160 144	Tera	172
Proton	173 171 143 131 058 004	Thomas	245
Quasar	250 056 044 034 017	TMK	004
Radio Shack	143 127 043 019 004	Toshiba	232 138 101 062 040 032 030 015 007
RCA	228 220 165 160 152 144 074 065 056 024 023 004 001	Totevision	143
Realistic	047 043 019 007	Universal	009 008
Roctec	186	Viceo Concepts	146
Runco	182 168 073	Vidikron	184
Sampo	202 058 004 001	Vidtech	004
Samsung	251 248 209 160 143 127 105 101 089 026 004	Visio	100
Sanyo	082 057 053 020 007	Wards	249 164 143 074 072 064 063 060 034 028 019 009 008 004
Sceptre	035	Westinghouse	245 076
Scott	143 048 043 028 004	Yamaha	004 001
Sears	165 160 143 094 082 057 030 028 015 007 004	York	004
Sharp	207 170 143 081 029 028 022	Yupiteru	043
Siemens	088	Zenith	103 095 073 072

Programming Codes

DVD Programming Codes

DVD Brand	Code Numbers	DVD Brand	Code Numbers
Apex Digital	153 220	Nad	221
Broksonic	017	Onkyo	233 001
Cyberhome	165 020 004	Panasonic	234 228 167 152 149
Daewoo	193 171	Phillips	237 166 168 016 007
Denon	240 226	Pioneer	230 229 189 015
Emerson	158 150 148	Proceed	219
GE	243 231	Proscan	231 229
Go Video	014 160 002	RCA	243 231 170 019
Bgradiente	201 192	Samsung	248 161 013 005
Harmon Kardon	225 218 173	Sansui	017
Humax	190 191	Sanyo	006
JVC	238 012	Sharp	222 202
Kenwood	224	Sony	244 232 204 169 003 009
KLH	223	Sylvania	172 150
LG (Goldstar)	249 247 241 235	Thompson	243 231
Lite On	021	TIVO	191
Magnavox	237 163 168 016	Toshiba	250 245 233 190 194 151 011 018
Marantz	168	Yamaha	246 234
Memorex	008	Zenith	247 241 235 014
Mitsubishi	227		

Programming Codes

VCR Programming Codes

VCR Brand	Code Numbers	VCR Brand	Code Numbers
Aiwa	461 334	Magin	404
Akai	446 425 424 346 343 316	Magnavox	464 456 445 367 334
Ampro	372	Marantz	445 369 367 312
Anam	445	Marts	406
Audio Dynamics	343 339 312	Matsui	330
Bloksonic	429 337	Mei	445
Canon	445	Memorex	445 439 406 372 353 334 314 310 301
Capehart	408	MGA	359 346
Craig	435 404 301	Minolta	501
Curtis Mathes	445 341	MTC	404 334
Daewoo	417 412 411 408 310 307 305	Multitech	334 324
Daytron	408 343 339 312	NEC	4348 343 339 312
DBX	353 339 312	Nordmende	343
Dynatech	353 334	Optonica	353
Electrohome	359	Orion	325
Emerson	467 431 429 417 406 445 346 337 336 334 325 306	Panasonic	511 502 445 374 370
Fisher	310 309 308 301	Pentax	445 320
Funia	334	Philco	445 367 334
GE	447 444 409 407 445 372	Philips	406 445
Go Video	468 455 436 432 404	Pilot	406
Harman Kardon	346 312	Pioneer	348 321 320
Hitachi	460 343 334 326 320	Portland	408
Instant Replay	445	Proscan	505 504
JCL	445	Pulsar	372
JCPenney	406 404 445 320	Quartz	341 302
Jensen	343	Quasar	445
JVC	452 430 445 360 348 312	Radio Shack	423
Kenwood	348 347 334 314	RCA	509 458 447 445 444 409 407 404 341 334 320
LG (Goldstar)	423 414 406 320 312	Realistic	406 404 445 353 334 314 310 308 301
Lloyd	334	RICO	358
LXI	406 334 309 301	Runco	448

Programming Codes

VCR Programming Codes, continued

VCR Brand	Code Numbers	VCR Brand	Code Numbers
Salora	314	TEAC	343 339 334
Samsung	508 468 425 412 409 407 404 445 332	Technics	445 370
Sansui	435 348 343	Teknika	406 445 334 319
Santo	404 314 310 307 301	Thomas	334
Scott	431 429 412 337	TMK	306
Sears	412 406 320 314 310 309 308 301	Toshiba	521 431 413 412 382 359 347 320 308
Sharp	515 465 459 445 353	Totevision	406 404
Shintom	324	Unitech	404
Signature	334	Vector Research	312
Sony	512 506 454 453 445 378 376 358 357 356 353 352 301	Victor	348
Soundesign	034	Video Concepts	346 334 312
STS	320	Videosonic	404
Sylvania	520 519 518 445 367 359 334	Wards	431 404 445 353 324 320 301
Symphonic	334	Yamaha	343 339 334 312
Tandy	334 310	Zenith	467 406 380 732 358 356 348 334
Tatung	343 339		

Programming Codes

For Cable Boxes

Brand	Code Numbers	Brand	Code Numbers
ABC	205 200 103 039 004	Novaplex	092
Amricast	099	NSC	038
Antronit	014	Oak	204 037
Archer	014 007	Panasonic	047 044
Bell South	099	Paragon	008
Centurion	092	Philips	095 085 020 017
Century	007	Pioneer	203 231 121 105 034 103
Citizen	007	Prucer	078 047
Combano	081 080	PTS	202 001
consat	001	Pulsar	008
Comtronics	030	RCA	047
Digicable	206	Reconton	098
Eagle	003 030 020	Regal	049
Eastern	066 057	Regency	057
Echostar	106	Samsung	030
Electricord	032	Scientific Atlanta	231 205 200 118 117 110 042 037 034 011 008 001
Gemini	201 054	Signal	030
General Electric	072	Signature	103
General	104 001 103	SL Marx	030
GNC	099	Sony	214 213 212 211
Golden	030	Starcom	231 201 004
Hamlin	049	Stargate	201 104 030
Hitachi	103	Tadiran	030
Jerrold	231 201 200 101 069 004 001 103	Time Warner	231
Magnavox	095 094	Tocom	056 039 003
Media One	017	Toshiba	008
Memorex	008	Unika	014 007
Mitsubishi	102	United Cable	004
M-Net	204	Universal	035 032 014 007
Motorola	001 001	Viewstar	089 087 086 020 018
Movie Time	032	Zenith	093 060 008

11: Troubleshooting

X-arm™ Will Not Move

If X-arm becomes unresponsive, first check to see what the LED display on the side of the X-arm control reads. Then choose a course of action based upon the code.

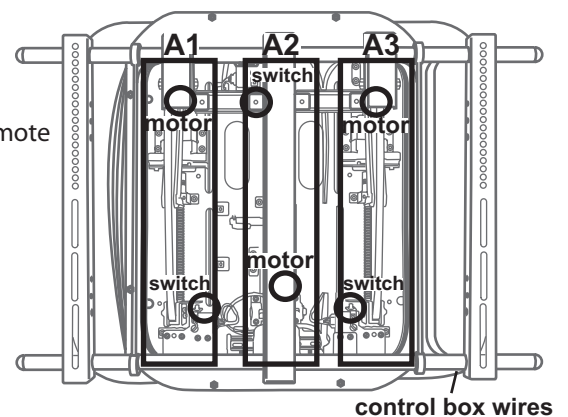
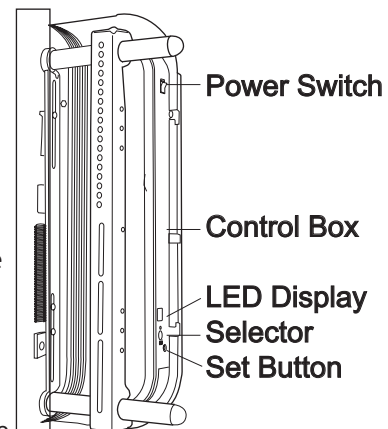
“A1”, “A2”, or “A3” is displayed on control box

Possible Causes:

- One of the motor cables is disconnected.
- One of the “stop” sensors is disconnected, misaligned or broken.
- One of the long drive screws is dirty.
- A motor coupling is loose.

How to Correct:

1. Unplug X-arm™ from power for at least 10 seconds.
2. Check that the TV and X-arm™ are not trapped against the wall or any other object.
3. Plug in X-arm™, turn on the power and try to move the X-arm™ using the remote control. If it works properly, do not continue to step 4.
4. With the X-arm™ powered on, insert the provided plastic pointer in the Selector hole on the side of the X-arm™ and press it until “t” shows on the LED display.
5. Using the remote control, straighten X-arm™ so that it is parallel with the wall, and then press the “Set” button on the control box for three seconds. The X-arm™ should return to the home position against the wall.
6. Unplug X-arm™ from power for at least 10 seconds and then plug it in again. Turn on the power and try to move the X-arm™ using the remote control. Continue to the next step if it does not work correctly.
7. Unplug the X-arm™ from power.
8. Remove the TV and inspect the areas in the picture corresponding to the error message. For example, if A3 is displayed on the LED, look at areas in the A3 box. Make sure that all motor and “stop” switch wire connections are securely connected.
9. Check to see that the wires leading to the control box are securely connected.
10. Clean any substances or particles from the long drive screws.
11. Plug in X-arm™, turn on the power and try to move the X-arm™ using the remote control.



Troubleshooting

continued

"C1","C2","C3" or "C4" is displayed on control box

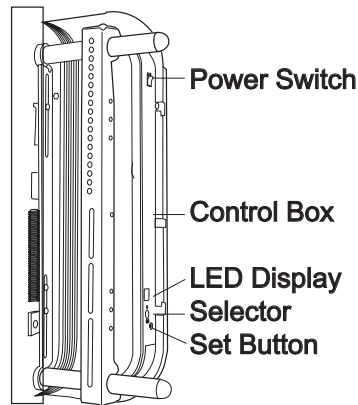
Normally X-arm™ will show the code associated with the TV mounted on it.

1. Check that the IR receiver is plugged into the side of the X-arm™ and that the IR Receiver eye is in direct line of sight with the remote control.

2. Make sure that the code set on the control box is the correct code for the TV width mounted.

Code	TV Outside Width
C1	40" - 44.9" (102 - 113 cm)
C2	45" - 48.9" (114 - 123 cm)
C3	49" - 55.9" (124 - 140 cm)
C4	56" - 63.0" (142 - 160 cm)

If the code is incorrect, reset the width code.



2-1. Press the power switch to ON (1).

2-2. Measure the **total outside width** of the TV including any side speakers that may be attached to the TV. Do not use the TV manufacturer's screen size, which is measured diagonally, to set the TV width on X-arm™.

2-3. Insert the provided plastic pointer into the selector hole, and press the button until the TV width code corresponds to the outside width of your TV as indicated in the table below.

Code	TV Outside Width
C1	40" - 44.9" (102 - 113 cm)
C2	45" - 48.9" (114 - 123 cm)
C3	49" - 55.9" (124 - 140 cm)
C4	56" - 63.0" (142 - 160 cm)

2-4. Hold the black rubber set button, below the selector hole, until the TV width code stops blinking.

3. Check that the TV and X-arm™ are not trapped against the wall or any other object.

4. Plug in X-arm™, turn on the power and try to move the X-arm™ using the remote control. If it works properly, do not continue to the next step.

5. Insert the provided plastic pointer into the Selector hole on the side of X-arm™, and press the button until a "t" is shown.

6. Using the remote control, straighten X-arm™ so that it is parallel with the wall and then press the Set button on the control box for three seconds. X-arm™ will return to the home position.

7. Unplug X-arm™ and plug it in again.

Troubleshooting

continued

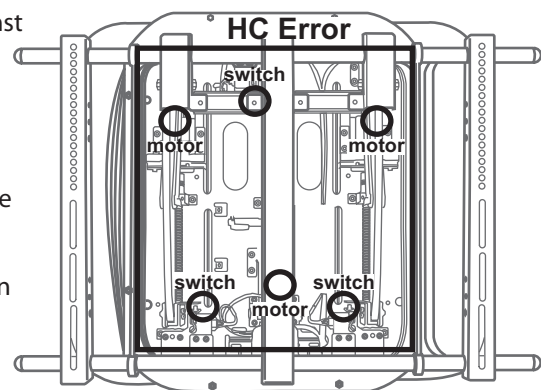
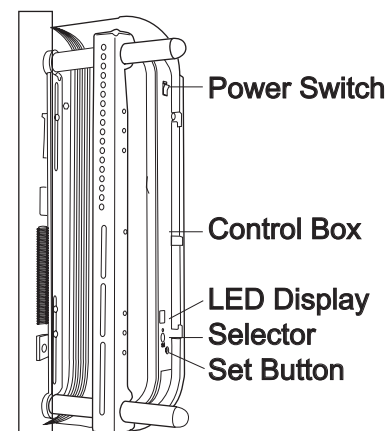
“HC” is displayed on control box

Possible Causes:

- Person or object is obstructing the motion of the X-arm™.
- One of the large drive screws has dirt or something on it.
- The linkages are rubbing against something.
- A motor cable has a short.

How to Correct:

1. Unplug X-arm™ from power for at least 10 seconds..
2. Check that the TV and X-arm™ are not trapped against the wall or any other object.
3. Plug in X-arm™, turn on the power and try to move the X-arm™ using the remote control. If it works properly, do not continue to the next step.
4. With the X-arm™ powered on, insert the provided plastic pointer in the Selector hole on the side of the X-arm™ and press it until “t” shows on the LED display.
5. Using the remote control, straighten X-arm™ so that it is parallel with the wall, and then press the “Set” button on the control box for three seconds. The X-arm™ should return to the home position against the wall.
6. Turn the power switch on the control box to “0” (OFF).
7. Hold down the Set button on the control box while switching the power switch to “1” (ON). Continue holding down the Set button for 5 seconds until the display reads **CT**.
8. Stand back while X-arm™ moves through the calibration sequence, moving in and out, left and right and up and down.
9. X-arm™ is done calibrating when it goes back to the home position against the wall.
10. Turn on the X-arm™ and test to see if it is operating normally. If it is not, remove the TV from X-arm™ and continue.
11. Check that there are no foreign objects in the switches and motors in the areas shown in the picture.
12. Check to see that the wire connections are securely connected and clean any substances that are found around the large drive screws.
13. Check the motors for faults in the areas shown in the picture.
14. Plug in X-arm™. Turn on the power, and try to move X-arm™ using the remote control.



Troubleshooting

continued

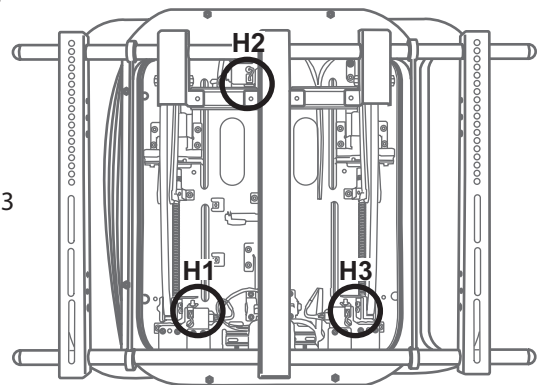
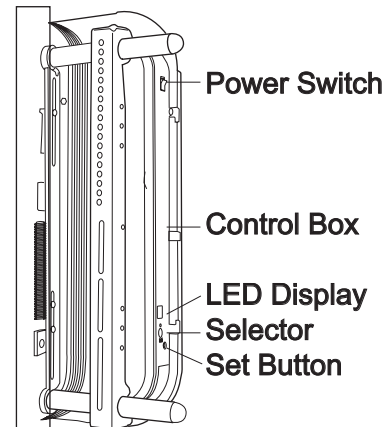
"H1", "H2", or "H3" is displayed on control box

Possible Causes:

- A cable has become disconnected.
- A "stop" switch is faulty.
- There is dirty or debris in one of the switches.

How to Correct:

1. Unplug X-arm™ from power.
2. Check that the TV and X-arm™ are not trapped against the wall or any other object.
3. Plug in X-arm™, turn on the power and try to move the X-arm™ using the remote control. If it works properly, do not continue to step 4.
4. Turn the power switch on the control box to "0" (OFF).
5. With the X-arm™ powered on, insert the provided plastic pointer in the Selector hole on the side of the X-arm™ and press it until "t" shows on the LED display.
6. Using the remote control, straighten X-arm™ so that it is parallel with the wall, and then press the "Set" button on the control box for three seconds. The X-arm™ should return to the home position against the wall.
7. Unplug X-arm™ from power for at least 10 seconds and then plug it in again. Turn on the power and try to move the X-arm™ using the remote control. Continue to step 8 if it does not work correctly.
8. Unplug the X-arm™ from power.
9. Remove the TV and inspect the areas in the picture corresponding to the error message. For example, if H3 is displayed on the LED, look at areas in the H3 circle. Make sure that all motor and "stop" switch wire connections are securely connected.
10. Clean and substances or particles from the long drive screws.
11. Plug in X-arm™, turn on the power and try to move the X-arm™ using the remote control.



Troubleshooting

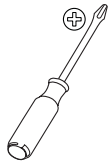
continued

If Your TV Leans Forward at the Home Position

1. Move the LA112 to the home position against the wall by pressing the “**SEL-IN/OUT**” button on the remote once.
 2. Insert the provided plastic pointer [07] into the control box Selector hole and press until the display reads “**HP**”.
 3. Using the remote control arrow keys (▲ ▼) adjust the LA112 so that the TV is parallel with the wall.
 4. Press the control box **Set** button for 3 seconds.
 5. The LA112 will now go to the new home position you just programmed every time you select the **SEL-IN/OUT** button.
-

12: Maintenance

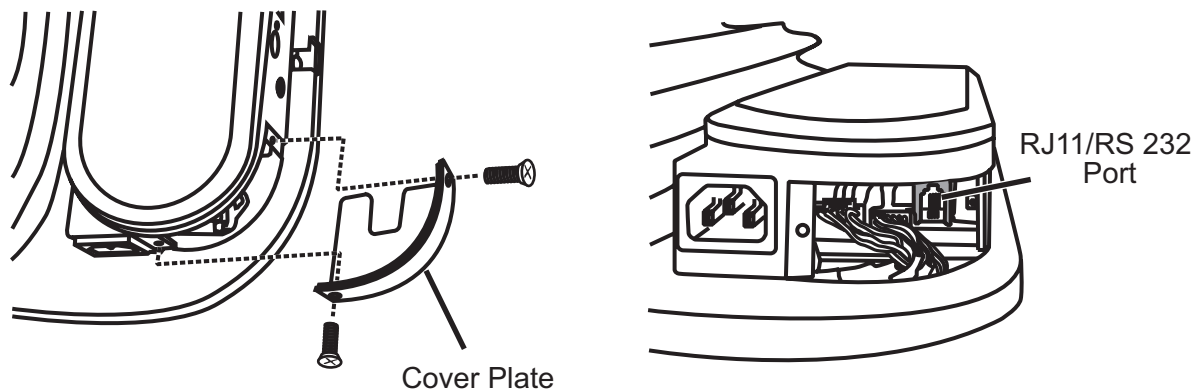
Remove the TV from your LA112 yearly to check that no cords are interfering with moving parts.



Home Automation Controls

Controlling X-arm™ with Home Automation (RJ11/RS232 port)

X-arm™ X700CS and X700CB (not available on the X700RS and X700RB) can be controlled through Home Automation remote controls and control panels such as those made by Crestron, AMX, Control4 and life|ware. To do this, do the following:



1. Using a philips screw driver, remove both screws from the cover plate located at the bottom, right-hand side of the control box.
2. Remove the cover plate to expose the RS232 port.
3. Download the RS232 program from the Home Automation vendor's web site.
4. Plug the home automation control into the RS232 port on X-arm™ running the cord out the back hole in the back plate of X-arm™.
5. Replace the cover plate and secure it in place with the screws.
6. Follow the vendor's instructions.

CSAV, Inc. and its affiliated corporations and subsidiaries (collectively, "CSAV"), intend to make this manual accurate and complete. However, CSAV makes no claim that the information contained herein covers all details, conditions, or variations. Nor does it provide for every possible contingency in connection with the installation or use of this product. The information contained in this document is subject to change without notice or obligation of any kind. CSAV makes no representation of warranty, expressed or implied, regarding the information contained herein. CSAV assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.

Warranty

Sanus Systems and CLO warrants this product, under normal use, to be free from defects in material and workmanship for a period of one year from the date of original purchase. Sanus Systems and CLO will, upon their discretion, repair or replace such defective equipment within the warranty period free of charge provided that the products are returned prepaid to CLO. Thereafter, repairs will be made at established factory prices. Unauthorized service or repair by anyone other than authorized CLO personnel renders this Warranty void and releases Sanus Systems and CLO from any further responsibility or obligation. LA112 mounting brackets are intended for use only with the maximum weight of 180 lbs (81 kg) and overall outside TV width up to 63" (160 cm). Any damage caused by failure to observe proper packing or to observe instructions for installation or by installing a TV over the specified maximum weight and/or maximum width prescribed, by accident or in transit or elsewhere will not be covered by the Warranty. This Warranty is in lieu of all other Warranties expressed or implied, and no one is authorized to assume any liability on behalf of Sanus Systems or CLO, or impose any obligation on Sanus Systems or CLO, in connection with the sale of any product other than as outlined above. In no event will responsibility be assumed or implied for consequential damage arising from the theft of any product secured by a CLO security device, by delay of installation, interrupted operation or other causes.

For updates and information about the LA112, please visit our website at www.sanus.com.

Your sales receipt is required for this Warranty to be applicable.

In order to receive warranty service, your product must be registered within 30 days of purchase by mail. To register by mail, fill out the Warranty Registration Card and mail it in with your original receipt.

To register by mail:

1. Fill out the Warranty Registration Card (below).
2. Provide a copy of your original sales receipt.
3. Mail both the card and the original sales receipt to the following address:

Warranty Registration
CLO Systems, LLC
1501 West Cameron Ave., Suite 215
West Covina, CA 91790

----- Cut here -----

Warranty Registration Card

Purchaser Information

First Name:

Last Name:

Address:

City:

State:

Phone #:

E-mail:

Product Information

Model #

Serial #

Place of Purchase:

Date of Purchase:

mm/dd/yyyy